



**DEKEMA**

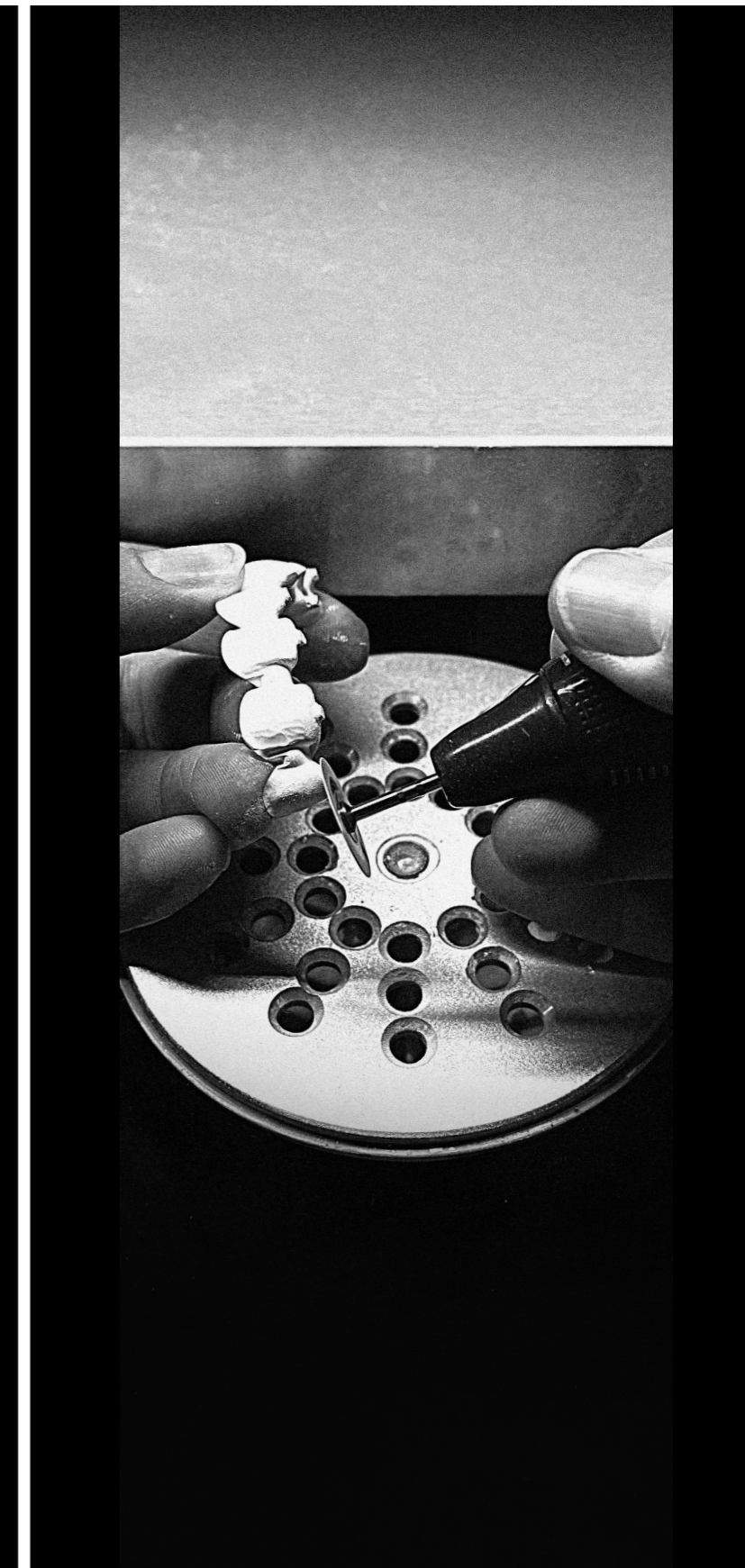
Der Ofen.™



**SINTER**

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# DEKEMA. Passion.

It's our ambition to further refine our already matchless dental sintering furnaces. We have decades of experience with every component of our products. Dental sintering furnaces by DEKEMA are made exclusively of high-quality materials and are superior in their class. As a fully independent German manufacturer, we top the highest quality expectations.

## What are your benefits?

The best performance, reproducibility and quality are embedded in incredible ease of use.

**„YOU HAVE TO DELIVER  
PERFECT WORK?  
DAY AFTER DAY?  
YOU CANNOT AFFORD  
A DIFFERENT PRODUCT.“**

Experience the world of DEKEMA in your lab every single day. We offer the highest level of service. Fast support matters of course, as is the rapid and straightforward provision of replacement equipment and support for new developments. That's what we all stand for, DEKEMA and our worldwide partners.



# DEKEMA. Claim.

The DEKEMA AUSTROMAT™ family is a result of a premium workmanship. The unique concept of the firing chamber, the intuitive user interface and its functionality, which sustains any worldwide comparison.

## Perfect results – simple as never before.

Control your AUSTROMAT™ via the high-resolution touch screen, with your computer or your smartphone. We even provide solutions for a one-click cycle start. Don't waste your time with programming, emphasize on your core business.

**„AS SIMPLE AS POSSIBLE,  
AS DETAILED AS NECESSARY!“**

## Fine tuning necessary? Any time!

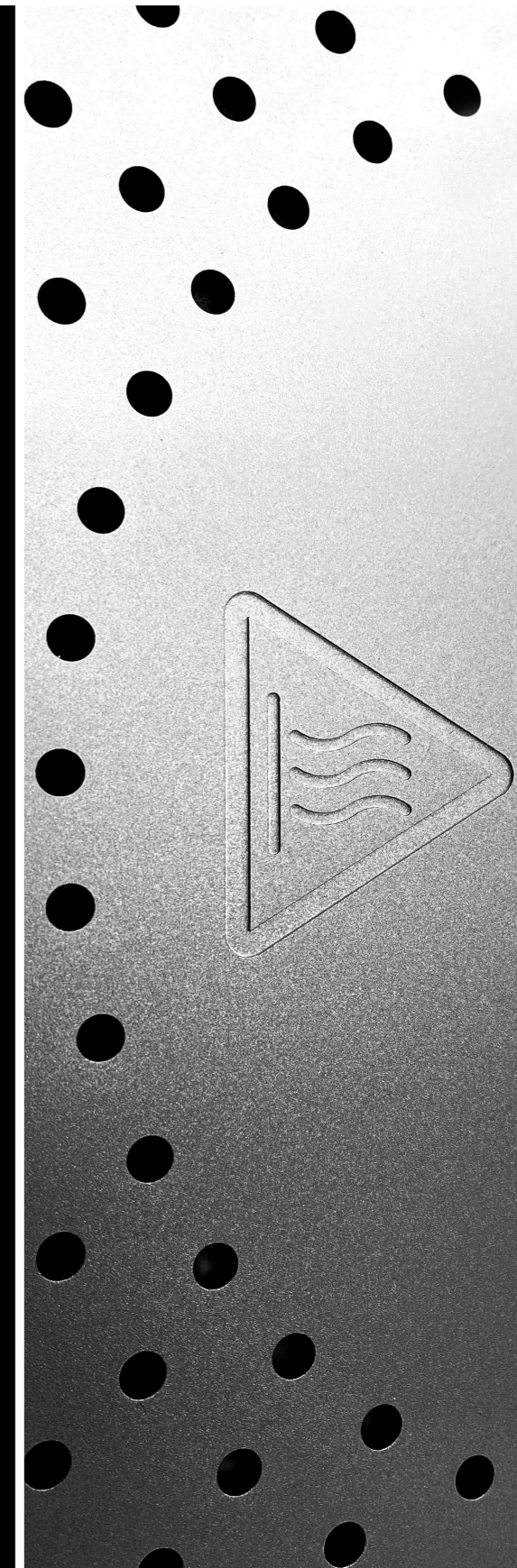
Up to five different input screens offer access to every single parameter, even during the program run.

## Feels like home.

The user interface is consistent throughout all models. No matter which furnace you use, you immediately feel familiar and training has gone the way of the todo.

## Everything is possible!

Do you prefer working with a computer mouse or a keyboard? Just connect them to the USB interfaces and get started.





# DEKEMA. Manufacture.

## 100% Made in Germany.

All DEKEMA furnaces are hand-crafted products of our German manufactory. Every single part is either manufactured inhouse or prioritized from specialized regional suppliers.

## DEKEMA. Customize.

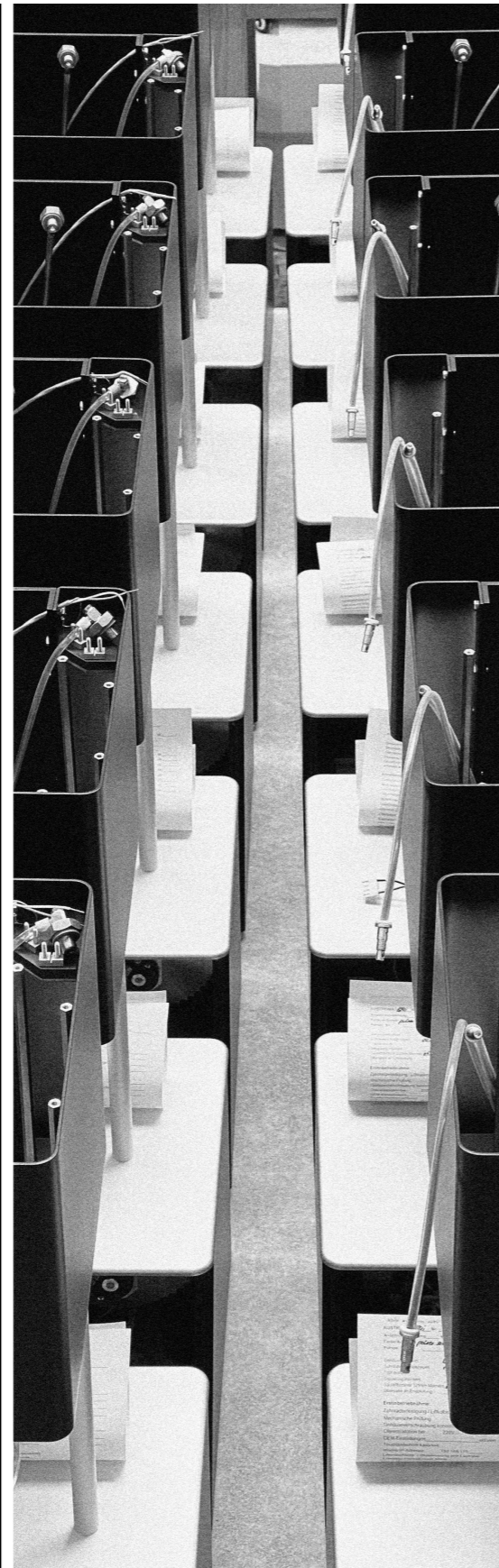
You would like to individualize your furnace? Let your equipment reflect your personality. An individual screensaver, your logo, or your corporate color – DEKEMA customizes your AUSTROMAT™.

## DEKEMA. Housing.

- » Convection cooling integrated by design without separate fan
- » Corrosion-free and lightweight aluminum housing
- » Surface texture in matt silver or matt black

## DEKEMA. Lift system.

- » Vibration-free lift movement
- » Durable, maintenance-free stainless steel mechanical parts
- » Individually selectable drying position



## DEKEMA. Firing chamber.

- » Designed decades ago – used for decades – refined over decades
- » Unsurpassed harmonic energy distribution
- » Fiber insulation – pure quality and high precision execution

## DEKEMA. Fiber insulation table.

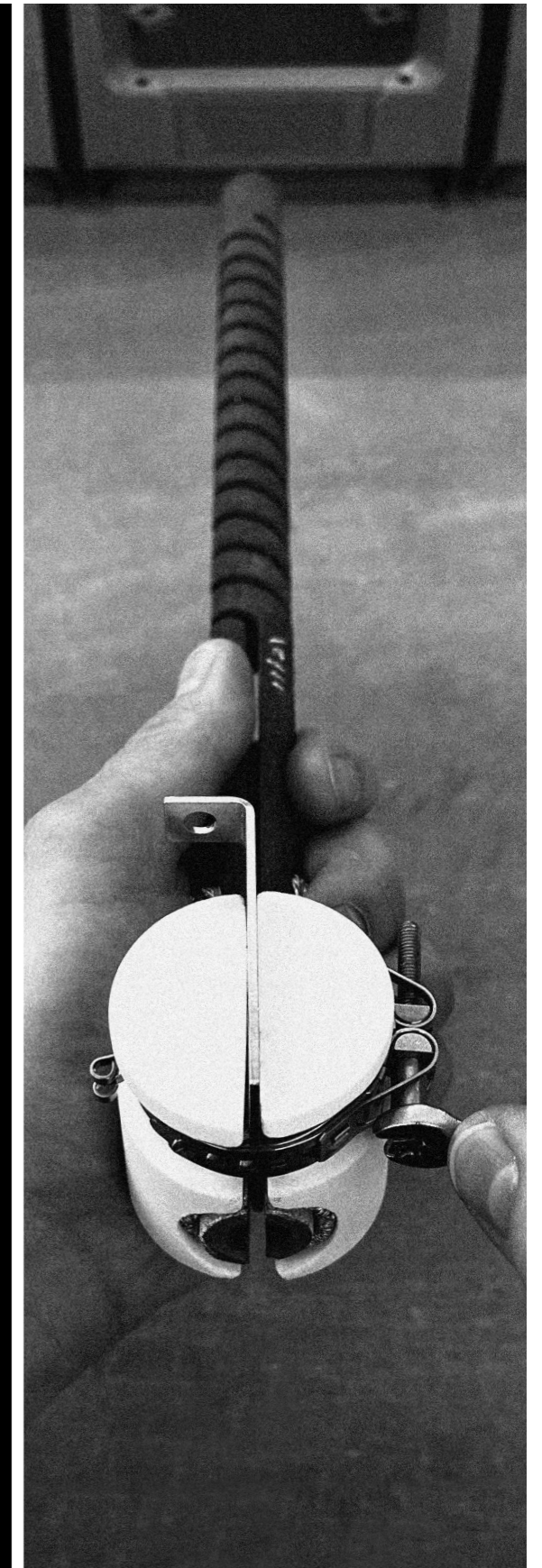
- » Patented multi-compound fiber insulation table
- » High-purity insulation for high temperature and thermal shock resistance

## DEKEMA. Tray system.

- » Patented tray system for easy handling and piling
- » Sintering in several levels
- » Thermal shock resistant

## DEKEMA. SiC heating elements.

- » DEKEMA specific, high purity SiC (silicon carbide) heating elements
- » Homogeneous temperature distribution
- » No discoloration
- » Robust and durable
- » Highest energy efficiency





# DEKEMA. Highlights.

## DEKEMA IoT (Internet of Things)

Just register your DEKEMA furnace at DEKEMA online and profit from a secure backup of the process data and fast service to minimize downtime.

## DEKEMA online service

Our DEKEMA online service is available twenty-four-seven. Register at [www.dekema.com](http://www.dekema.com), save time and get the best service and support.

## DEKEMA Connect

Connect your AUSTROMAT™ to the internet. Benefit from almost unlimited possibilities in operation, programming, control, and maintenance of your AUSTROMAT™.

## DEKEMA Check

Internal test routines during the program run monitor all relevant parameters. An automatic diagnosis routine has been integrated for all substantial components to determine the service intervals.

## DEKEMA online

More than 100.000 firing, pressing and sintering programs of all manufacturers of dental ceramics in our database – and more are added every day.

Load and play – it doesn't get easier than this!

## myDEKEMA

The installed VNC server provides remote access to your device, only through your active clearance, in case of questions. This reduces downtime and eliminates shipping your furnace or arranging service dates on-site.

## OPC and OPC UA

OPC – proven technology for communication between automation systems.  
 OPC UA – an advanced, platform-independent and secure architecture that enables seamless connection of different devices and supports real-time data transmission.

# Welcome to the Circle.

## DEKEMA Circle

The DEKEMA Circle connects all of your DEKEMA devices. You profit from online software updates and backups, internet database connection, remote control, and the automatic transfer of project-specific firing, pressing and sintering programs.

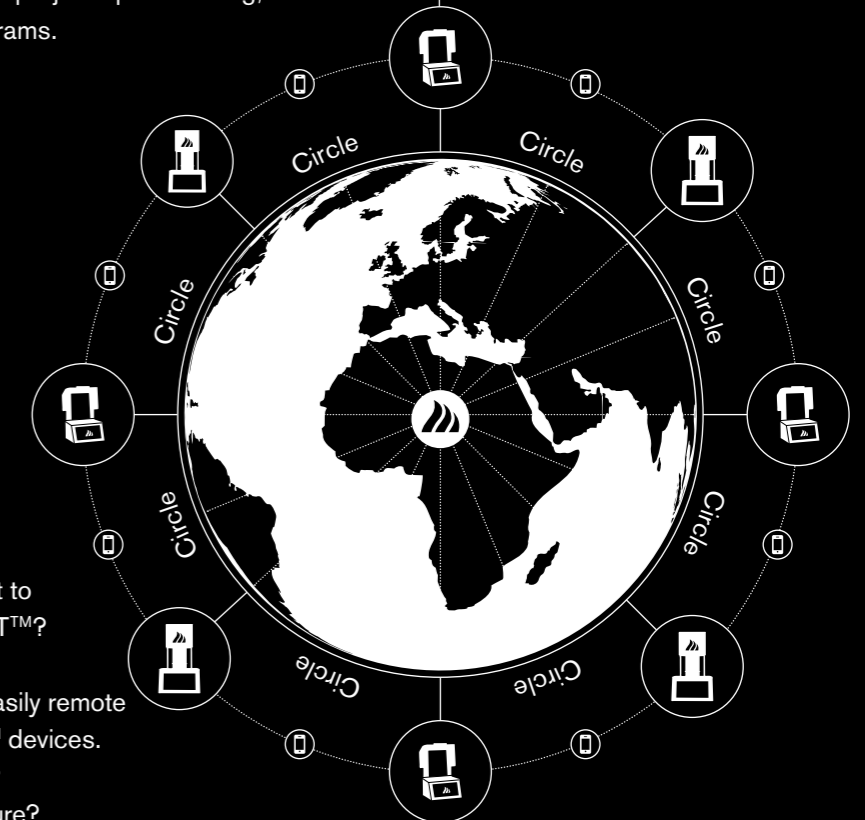
**„JUMP INTO THE DEKEMA CIRCLE – YOU WON'T STEP BACK.“**

## Enjoy control

You're in a meeting and want to supervise your AUSTROMAT™? With the DEKEMA Circle and your smartphone, you easily remote control your AUSTROMAT™ devices. Is the firing already finished? Did you adjust the temperature? Find all information you require, whenever you want, wherever you are.

## Houston, we have a problem!

You have questions – we have the answer. With an internet connection, our support can access the furnace remotely – if you allow us to! By analyzing your QM data, we troubleshoot from any place, anywhere, anytime. We want you to be operational.







**„IT ALL BEGAN  
WITH A  
CERAMIC FURNACE.  
TODAY  
YOU RECEIVE THE  
MAGNUM OPUS.“**

Dr. Stephan Miller, CEO

Be inspired by  
our magna opera



**AUSTR**

**SINTER**

**DMAT™**

**664 / 664i™**



# The little one.

## AUSTROMAT™ 664

- » DEKEMA patented high-temperature precision thermocouple design, suitable for speeding without overshooting temperature
- » DEKEMA patented tray system with up to 2 levels (Ø 2,56" per level), invented for speeding or easy handling of up to 40 units
- » No contamination and no discoloration
- » Absolutely clean – no purge cycles necessary
- » Nonstop – start subsequent cycles immediately
- » DEKEMA AutoDry™
- » Access to more than 100.000 firing, pressing and sintering programs of all manufacturers of dental ceramics through DEKEMA online



Applications	with vacuum	without vacuum
Fire	–	–
Press	–	–
Sinter	–	»
Glaze	–	»
Crystallize	–	»
Infiltrate	–	–

**DEKEMA. Efficiency.**  
 The high-quality SiC heating technology ensures a brilliant result. No necessity of purge cycles due to the absolutely clean chamber. The super fast cycles and the non-stop sintering raises efficiency and profit significantly.

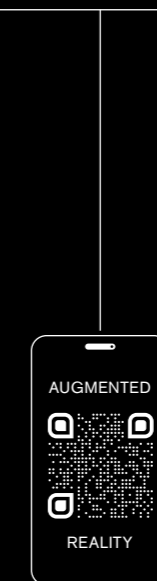
\*optional

## AUSTROMAT™ 664i™

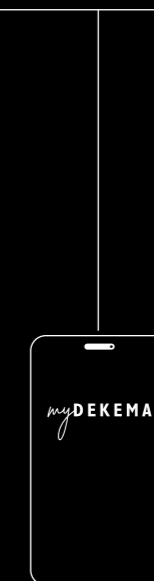


### +++ Serie i features +++

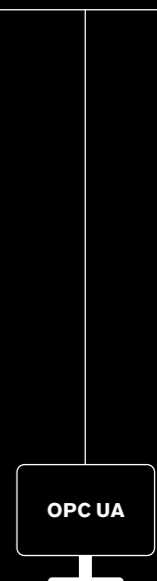
- » 10,4" color touch screen display
- » DEKEMA Internet database furnace connection
- » Internet program streaming
- » Cloud management in the DEKEMA Circle
- » IoT (Internet of Things): If the DEKEMA furnace is registered at DEKEMA online, you benefit from a secure backup of the process data and fast service
- » Quality management: Recording of process data
- » USB functionalities: Transfer of firing and press programs, photos, QM files and printouts; backup and update
- » Ethernet interface
- » Online: Backup and update



included



included



optional



# DEKEMA. Accessories. AUSTROMAT™ 664 / 664i™

## Software Package for AUSTROMAT™ 664 Art. # 101933

Activation of the following functions: database access, VNC, FTP, quality management and OPC.



## Software Package for AUSTROMAT™ 664 Art. # 101933 Temperature upgrade kit (max. temp. 1.560 °C) Art. # 105619

Activation of the max. temperature of 1.560 °C.  
Prerequisite for the activation of the temperature upgrade kit is the activation of the software package.



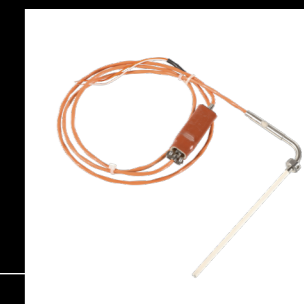
## Heating element, SiC hanging, set with cable Art. # 105413

Heating element made of SiC, in set with installation accessories for use in sintering furnaces with hanging radiators.



## Thermocouple, for hanging heating elements Art. # 106652

Thermocouple for use in sintering furnaces with hanging heating elements.



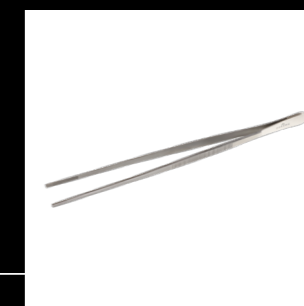
## Calibration set, high temperature furnaces Art. # 101916

Calibration set for exact temperature adjustment of high temperature furnaces after evaluation of the PTC ring at DEKEMA (scope of delivery).



## Tweezers, DEKEMA logo Art. # 105236

Furnace tweezers for safe handling of firing objects.



# DEKEMA. Accessories. AUSTROMAT™ 664 / 664i™

## Firing table ring, Ø 65 mm, 28 mm height Art. # 105138

Firing table ring, Ø 65 mm, 28 mm height, spacer for sintering planes.



## Insulating table, Ø 65 mm sintering plane Art. # 105169

Insulating table for use in sintering furnaces with Ø 65 mm sintering planes.



## Firing table, basis trough, Ø 65 mm Art. # 105139

Firing table basis trough, Ø 65 mm, can be used on both sides, flat and low trough, for sintering.



## SinterPlace set, Ø 65 mm

Art. # 105835

SinterPlace set, Ø 65 mm, set, consisting of insulating body, firing table ring, Ø 65 mm and tongs, for depositing the firing table basis trough.



## Sintering beads, Micro Pearls (200 g)

Art. # 105262

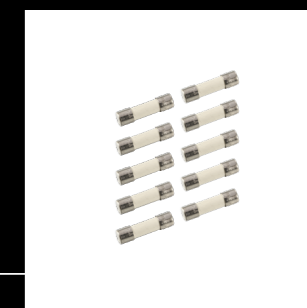
Sintering beads for distortion-free sintering of objects in the firing table basis hybrid Ø 100 mm and firing table basis trough Ø 65 mm.



## Fuse (10 pieces), 5x20 mm, 16 A, 230 V

Art. # 100512

Fuse (10 pieces), 5x20 mm, 16 A, 230 V, for high temperature furnaces.





**AUSTR**

**SINTER**

**DMAT™**

**674 / 674i™**

# The big one.

## AUSTROMAT™ 674

- » Already prepared for ultrafast cycles below 1 hour
- » DEKEMA patented high-temperature precision thermocouple design, suitable for speeding without overshooting temperature
- » DEKEMA patented tray system with up to 2 levels (Ø 3,94" per level), invented for speeding or easy handling of up to 80 units
- » No contamination and no discoloration
- » Absolutely clean – no purge cycles necessary
- » Nonstop – start subsequent cycles immediately
- » DEKEMA AutoDry™
- » Access to more than 100.000 firing, pressing and sintering programs of all manufacturers of dental ceramics through DEKEMA online



Applications	with vacuum	without vacuum
Fire	–	–
Press	–	–
Sinter	–	»
Glaze	–	»
Crystallize	–	»
Infiltrate	–	–

\*optional

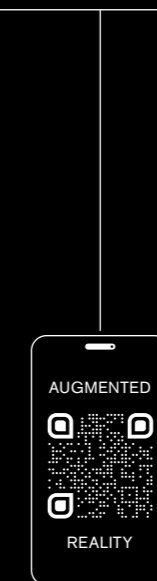
**DEKEMA. Efficiency.**  
 The high-quality SiC heating technology ensures a brilliant result. No necessity of purge cycles due to the absolutely clean chamber. The super fast cycles and the non-stop sintering raises efficiency and profit significantly.

## AUSTROMAT™ 674i™

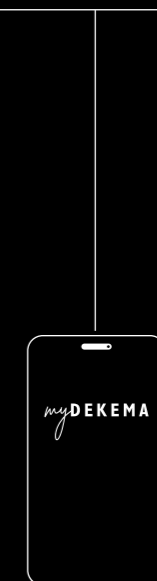


### +++ Serie i features +++

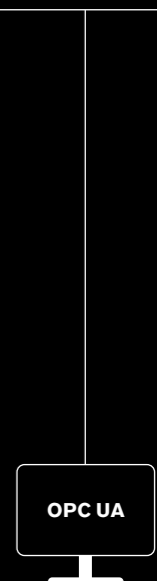
- » 10,4" color touch screen display
- » DEKEMA Internet database furnace connection
- » Internet program streaming
- » Cloud management in the DEKEMA Circle
- » IoT (Internet of Things): If the DEKEMA furnace is registered at DEKEMA online, you benefit from a secure backup of the process data and fast service
- » Quality management: Recording of process data
- » USB functionalities: Transfer of firing and press programs, photos, QM files and printouts; backup and update
- » Ethernet interface
- » Online: Backup and update



included



included



optional



# DEKEMA. Accessories.

## AUSTROMAT™ 674 / 674i™

### Software Package for AUSTROMAT™ 674 Art. # 101933

Activation of the following functions: database access, VNC, FTP, quality management and OPC.

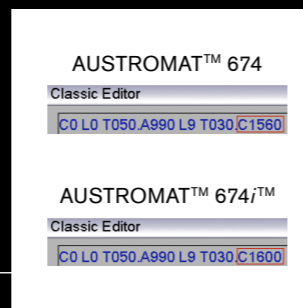


### Software Package for AUSTROMAT™ 674 Art. # 101933

#### Temperature upgrade kit (max. temp. 1.560 °C) Art. # 105619

#### Temperature upgrade kit (max. temp. 1.600 °C) Art. # 106723

Prerequisite for the activation of the temperature upgrade kit is the activation of the software package.



### Heating element, SiC hanging, set with cable Art. # 105413

Heating element made of SiC, in set with installation accessories for use in sintering furnaces with hanging radiators.



### Thermocouple, for hanging heating elements Art. # 106652

Thermocouple for use in sintering furnaces with hanging heating elements.



### Calibration set, high temperature furnaces Art. # 101916

Calibration set for exact temperature adjustment of high temperature furnaces after evaluation of the PTC ring at DEKEMA (scope of delivery).



### Gripper, DEKEMA logo Art. # 101921

Gripper for safe handling of sintering accessories with Ø 100 mm.



# DEKEMA. Accessories. AUSTROMAT™ 674 / 674i™

## SinterPlace set, Ø 100 mm

Art. # 105836

SinterPlace set, Ø 100 mm, set, consisting of insulating body, firing table ring, Ø 100 mm, 36 mm height and pliers, for secure placement of the firing table Basis Hybrid.



## Firing table ring, Ø 100 mm, 36 mm height

Art. # 105317

Firing table ring, Ø 100 mm, 36 mm height, standard spacer for sintering planes.



## Firing table ring, Ø 100 mm, 28 mm height

Art. # 105462

Firing table ring, Ø 100 mm, 28 mm height, low spacer for sintering planes.



## Firing table, basis hybrid, Ø 100 mm

Art. # 105648

Firing table basis hybrid, Ø 100 mm, can be used on both sides, low trough and with numbered cavities, for sintering.



## Sintering beads, Micro Pearls (200 g)

Art. # 105262

Sintering beads for distortion-free sintering of objects in the firing table basis hybrid Ø 100 mm and firing table basis trough Ø 65 mm.



## Insulating table, Ø 100 mm sintering plane

Art. # 105381

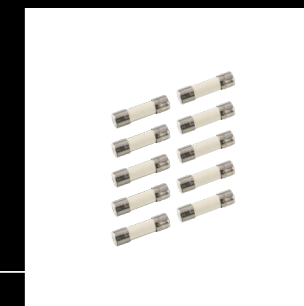
Insulating table for use in sintering furnaces with Ø 100 mm sintering planes.



## Fuse (10 pieces), 5x20 mm, 16 A, 230 V

Art. # 100512

Fuse (10 pieces), 5x20 mm, 16 A, 230 V, for high temperature furnaces.

























# DEKEMA. Technical data.

	AUSTROMAT™ 664	AUSTROMAT™ 664 <sub>i</sub> ™	AUSTROMAT™ 674	AUSTROMAT™ 674 <sub>i</sub> ™
Size (WxHxD)	15,08" x 30,71" x 13,50"	15,08" x 30,71" x 13,50"	15,08" x 30,71" x 13,50"	15,08" x 30,71" x 13,50"
Weight	46 lbs	51 lbs	53 lbs	55 lbs
Power consumption	220 – 240 V/50–60 Hz	220 – 240 V/50–60 Hz	220 – 240 V/50–60 Hz	220 – 240 V/50–60 Hz
Maximum power consumption	2.000 W	2.000 W	2.000 W	2.000 W
Maximum sintering temperature	1.530 °C/ 1.560 °C optional	1.560 °C	1.530 °C/ 1.560 °C optional	1.560 °C/ 1.600 °C optional

# DEKEMA. Device equipment.

	AUSTROMAT™ 664	AUSTROMAT™ 664 <sub>i</sub> ™	AUSTROMAT™ 674	AUSTROMAT™ 674 <sub>i</sub> ™
Housing: Aluminum				
Corporate Design customization	optional	optional	optional	optional
Touchscreen	7,5", color	10,4", color	7,5", color	10,4", color
USB interface / Ethernet interface	 / optional		 / optional	
DEKEMA specific SiC heating element: high purity heating elements made of SiC (silicon carbide), firing at high temperatures, no discoloration				
Multi-compound fiber insulation: Multilayer insulation for sintering at high temperatures				
DEKEMA AutoDry™				

# DEKEMA. Software features.

	AUSTROMAT™ 664	AUSTROMAT™ 664i™	AUSTROMAT™ 674	AUSTROMAT™ 674i™
DEKEMA Internet database access for registered users				
DEKEMA Internet database furnace connectivity	optional		optional	
Internet program streaming	–		–	
DEKEMA Circle: Data Management in the Cloud	–		–	
IoT (Internet of Things: If the DEKEMA furnace is registered at DEKEMA online you profit from a secure backup of the process data and fast service to minimize downtime.)	–		–	
myDEKEMA: VNC-Viewer for remote control	optional		optional	
QM (quality management): Record of process files	optional		optional	
USB: Transferring sintering programs (dds)				
USB: Transferring fotos (jpeg)				
USB: Storage of QM files (dfl)	optional		optional	
USB: Storage of Printouts				
USB: Backup / Update				
Online: Backup / Update	optional		optional	
VNC-Server: VNC viewer for remote control of the DEKEMA furnace on the PC	optional		optional	
OPC: Industrial standardised connection for data exchange between different systems	optional		optional	
OPC UA: Secure, manufacturer-independent interface for Industry 4.0 and IoT communication	–	optional	–	optional
Programing languages	Classic	Classic, Professional, Chairside	Classic	Classic, Professional, Chairside



# DEKEMA. Accessories.

	AUSTROMAT™ 664	AUSTROMAT™ 664i™	AUSTROMAT™ 674	AUSTROMAT™ 674i™
Heating element, SiC hanging, set with cable (Art. # 105413)				
Thermocouple, for hanging heating elements (Art. # 106652)				
Calibration set, high temperature furnaces (Art. # 101916)				
Insulating table, Ø 65 mm sintering plane (Art. # 105169)			–	–
Firing table ring, Ø 65 mm, 28 mm height (Art. # 105138)			–	–
Firing table, basis trough, Ø 65 mm (Art. # 105139)			–	–
SinterPlace set, Ø 65 mm (Art. # 105835)	optional	optional	–	–
Insulating table, Ø 100 mm sintering plane (Art. # 105381)	–	–		
Firing table ring, Ø 100 mm, 36 mm height (Art. # 105317)	–	–		
Firing table ring, Ø 100 mm, 28 mm height (Art. # 105462)	–	–	optional	optional
Firing table, basis hybrid, Ø 100 mm (Art. # 105648)	–	–		
SinterPlace set, Ø 100 mm (Art. # 105836)	–	–	optional	optional
Sintering beads, Micro Pearls (200 g) (Art. # 105262)	optional	optional	optional	optional
Fuse (10 pieces), 5x20 mm, 16 A, 230 V (Art. # 100512)	optional	optional	optional	optional
Tweezers, DEKEMA logo (Art. # 105236)				
Gripper, DEKEMA logo (Art. # 101921)	–	–	optional	optional
Software Package for AUSTROMAT™ 664 or AUSTROMAT™ 674 (Art. # 101933)	optional		optional	
Software Package for AUSTROMAT™ 664 (Art. # 101933) and Temperature upgrade kit (max. temp. 1.560°C) (Art. # 105619)	optional		optional	
Software Package for AUSTROMAT™ 674 (Art. # 101933) and Temperature upgrade kit (max. Temp. 1.560°C) (Art. # 105619) / Temperature upgrade kit (max. Temp. 1.600°C) (Art. # 106723)	optional / –	/ –	optional / –	/ optional



# DEKEMA

Der Ofen.™

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